

POPULATION TODAY

Vol. 17, No. 3 March 1989

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One of China's 1,087,000,000 citizens.
(See page 12.)



PRB

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FROM THE EDITOR'S DESK

The Census Bureau's recently released study which shows a declining U.S. population in about 50 years surely came as no surprise to demographers, who can foresee the ramifications of below-replacement fertility and an aging population.

But the study marks the first time that the Bureau projected population decline as the most realistic outcome of current trends in the U.S. And it created quite a flurry of commentary in the media.

Experts are divided on the impact of a declining U.S. population. Some write with furrowed brows about labor shortages and reduced competitiveness in international markets. Others counter that numbers are not synonymous with strength, militarily or economically. And caring for an aging population weighs heavily

Twenty years ago, when Zero Population Growth was founded, who would have thought that the idea that the U.S. could achieve—even surpass—ZPG would be met with worried musing and apprehensive speculation?

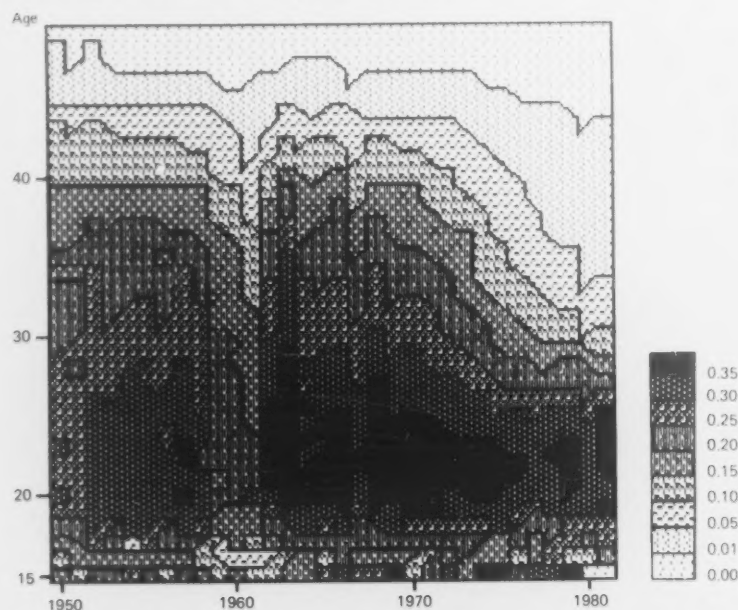
The rapacious consumers of natural resources who inhabit the United States contribute in no small part to the environmental crisis we are all becoming more aware of today. Surely having fewer U.S. consumers in 50 years is at least one prospect to be hailed, not scorned.

As much speculation as these projections have generated, one thing is for certain: come what may in 2040, it's very likely that the scenario will be one that the experts haven't yet envisioned.

—Janine Adams

SPEAKING GRAPHICALLY

A Fertility Contour Map of China



The "Lexis map" above graphically depicts the trends of age specific fertility in China among ever-married women from 1950 to 1981. It shows at a glance the proportion of women having children in each year, a figure that varies from zero to more than 0.35, depending on age.

Reproduced with the permission of the Population Council, from Zeng Yi, James W. Vaupel, and Anatoli I. Yashin, "Marriage and fertility in China: A graphical analysis," *Population and Development Review* 11, No. 4 (December 1985) (p. 728), Figure 4.

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U.S. to Face Population Decline?

The U.S. population could top out at 309 million around 2040 and then start to decline, according to new Census Bureau projections released in January.

U.S. population as of January 1, 1989 was 247,443,000 people, according to the Bureau.

The projection marks the first time in many decades the Bureau's middle projection has raised the possibility (some social commentators would say specter) of future population decline. The Bureau produces a wide spectrum of alternative projections according to a mix of assumptions, so in the past its low series has sometimes projected population decline.

Demographers are always painstakingly careful to say that their numbers are "projections, not predictions." A projection is a model of the future based on assumed future demographic trends. Demographers are also fond of saying, "A projection is never wrong." That is, the math behind the projection is always right, though the relevance of the projection numbers to actual real life (many years or decades hence) may be an entirely separate matter.

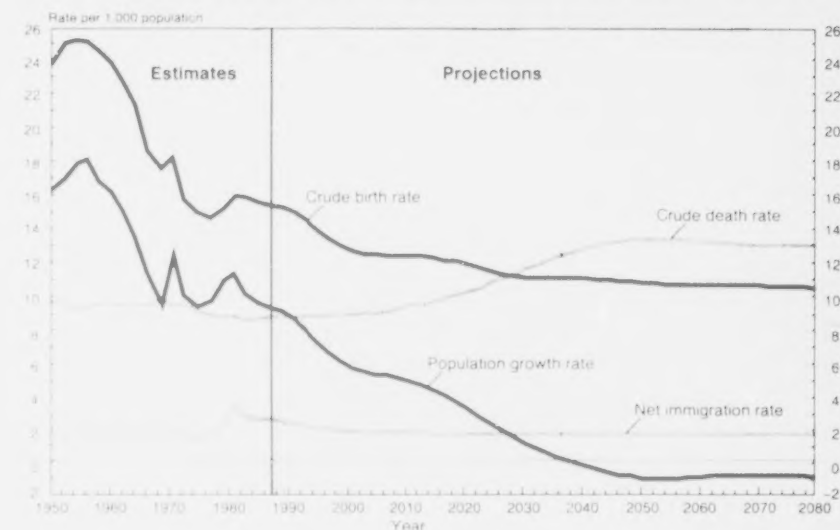
Assumptions are the driving force behind any projection. Often they may actually be of more interest than the final numbers they determine. The new Bureau projections consist of fully 30 projection series combining different assumptions about future U.S. population change. To give an idea of the range of the series:

Series	Total pop. proj. in 2080 (in thousands)
Lowest	184,614
Middle	292,235
Highest	501,483

Why the variation? The three projections are the product of assumptions about future trends in the three components of population change: fertility, mortality, and net immigration.

As the names imply, "lowest" results from the lowest assumptions about all three of these components; "middle"

Components of Population Change in the Middle Series: 1950 to 2080



Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, Nos. 802 and 1006, table 1-B.

the middle, and "high" the highest values within the realm of possibility. The middle range of possible alternatives is usually considered the most likely. The remaining 27 projection series assume differing combinations of these components—Series 8, for example, assumes future low mortality, high immigration, and middling fertility; Series 9 assumes these components to be low, high, and high. And so forth.

To give an idea of the assumptions for each component:

Fertility. Completed family size for the low series is assumed to be an average of 1.5 children per woman in the population; the medium series, 1.8 children; and the high series, 2.2 children per woman. The medium series represents a drop from the previous medium series of projections, which posited 1.9 children.

Mortality. U.S. life expectancy, which has a long history of gradual increase, is 75.0 years as of 1986 and is expected to continue improving at least incrementally in the future. In the Bureau's middle series, life expectancy is projected to rise about 6 years by 2080, to 81.2. Under low-mortality conditions, the projections assume a rise of about 12 years; the high-mortality projections, a rise of only about three years.

Immigration. The middle assumption postulates that annual net immigration, an estimated 606,000 in 1988, will ultimately decline to 500,000 annually. The low immigration alternative is pegged at 300,000, while the high level is considered to be 800,000.

To show how immigration affects U.S. total population, using middle-series fertility, mortality, and immigration assumptions, the U.S. population is projected to reach 292.2 million in 2080. If, however, net immigration were reduced to zero, that figure would be 220.3 million, about one-quarter lower.

Immigration is the most difficult growth component to project. While population size and structure provide rich data for estimating future fertility and mortality, unforeseeable future changes in federal law or in the flow of undocumented immigration "are not particularly amenable to quantitative analysis," the Bureau report notes dryly.

—A.H.

Projections of the Population of the United States, by Age, Sex, and Race: 1988 to 2080 by Gregory Spencer, (Current Population Reports, P-25, No. 1018) is replete with graphs, methodology notes, and detailed tables showing the population consequences of 30 projection series. It is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Surveying Sex In the U.S.

Four decades after Alfred Kinsey's famous study, sexual behavior in the U.S. remains a great unknown, with meager quantitative data lost amid vast quantities of tabloid anecdotes.

A pilot study interviewing 2,300 people on their sexual behavior is starting this month, undertaken by the National Opinion Research Center (NORC), University of Chicago for the National Institute on Child Health and Human Development (NICHD).

About 20,000 people would be interviewed over two years for a representative sampling in a national survey, if all goes well with the pilot project and the government agrees to continue the investigation. One tactic NORC will try is using a card which lists sexual activities in several language phrasings accompanied by numbers (1 for kissing, 2) on the theory that people may be more at ease with numbers than with words.

The national survey was recommended by the National Academy of Sciences and the Institute of Medicine some years ago, primarily to help determine who is at risk for AIDS. Figures on possible HIV infections are — still — based upon Kinsey's studies in the 1930 and 1940s of midwestern college members.

The survey will concentrate on sexual and social behavior, particularly circumstances and practices such as drug abuse placing people at risk for AIDS and/or sexually-transmitted diseases.

The study will overlap in minor ways with other investigations, such as questions about contraception and age at first sexual intercourse also asked by the National Survey of Family Growth undertaken by the National Center for Health Statistics. Their Cycle IV field data are currently being processed. (PRB published an analysis of the 1982-83 survey in its *Population Bulletin* "Understanding U.S. Fertility: Findings from the National Survey of Family Growth, Cycle III," (Vol. 39, No. 5), by William F. Pratt, William D. Mosher, Christine A. Bachrach, and Marjorie Horn.

— R.Y.

WASHINGTON WATCH



The 101st Congress has convened and is slowly beginning to get the legislative process underway. President Reagan submitted a budget for Fiscal Year 1990 before he left office, which provided the initial framework for spending decisions. President Bush has now put his imprint on the FY 1990 budget but specifics are still sketchy. Congress is working on a budget resolution to be adopted on or before April 15th.

New Faces on Congressional Committees

Ten new Senators (five Democrats and five Republicans) were elected to the 101st Congress, with a sixth Republican appointed to fill the remaining term of now-Vice President Quayle. While this is a small change in the overall Senate membership, it has made a significant difference to committee memberships as many of the retiring Senators were senior and had assignments on major committees.

For example, the Senate Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies has a new Chairman, Senator Tom Harkin (D-Iowa) and a new ranking Minority Member, Senator Arlen Specter (R-Pa.). Four new members have been added to the Committee: Harvey Reid (D-Nev.), Brock Adams (D-Wash.), Thad Cochran (R-Miss.), and Phil Gramm (R-Tex.). This means that more than one-fourth of the Committee is new.

On the House side, 34 new Members (18 Democrats and 16 Republicans) were elected to the House of Representatives. However, the comparable House Appropriations Subcommittee on Labor, Health, and Human Services continues with the same membership.

These changes are significant because these Committees have responsibility for deciding appropriations for the National Institutes of Health (NIH) and, in particular, the National Institute of Child Health and Human Development (NICHD) and the

National Institute of Aging; major sources of funding for demographic research.

Major changes have also occurred in the House Subcommittee on Census and Population, charged with oversight of the 1990 Census. It has a new Chairman, Thomas C. Sawyer (D-Ohio), although Constance Morella (R-Md.) will remain ranking Republican. Former Chairman Mervyn Dymally (D-Calif.) will stay on the Subcommittee but has also been made Chair of the Foreign Operations Subcommittee of the House Foreign Affairs Committee. This Subcommittee has legislative responsibility for international population assistance programs so Congressman Dymally is now in a strategic position regarding foreign aid.

In the Senate a new Subcommittee on the 1990 Census has been created under the Committee on Governmental Affairs, with Senator Jeff Bingaman (D-NM) as Chair.

FY 1990 Budget

President Reagan sent Congress his proposed FY 1990 budget in January. President Bush used this budget as a framework for making his proposals for a "kinder, gentler" nation. The major change that Bush has proposed is slowing growth in the Defense Department's budget. Since President Bush has not outlined specific changes or all figures, the Reagan budget is still being used as the framework for appropriation decisions.

Specific recommendations in the Reagan budget include \$444 million for (NICHD) (including \$27 million for AIDS research). Of this approximately 16 percent — or \$71 million — will be spent on demographic and behavioral science research. While this is a \$14 million increase for the NICHD over the FY 1989 budget, it will not cover existing program costs. Only 19.7 percent of the competing research grants will be funded, compared to an NIH average of 24.4 percent. Negotiated

Continued on page 9

Aid to World Population Programs

Although the United States is the largest donor of international population assistance (foreign aid appropriations for FY 1989 provide \$197.9 million), several nations provide population assistance to other countries as well as to international groups and the UN specialized agencies.

The Population Crisis Committee of Washington, D.C. reports the following approximate amounts as the most recent information available:

Australia: \$2.5 million in 1986-1987, Australian International Development Assistance Bureau.

Canada: \$57.5 million for 1988-1989, Canadian International Development Agency.

Denmark: \$15.5 million for multilateral assistance in 1987, Danish International Development Agency.

Finland: \$1.2 million for multilateral assistance in 1988, Department for International Development Cooperation, Ministry of Foreign Affairs.

Italy: \$3.7 million in 1985, Directorate General for Development Cooperation, Ministry of Foreign Affairs.

Japan: \$60 million in 1988, Economic Cooperation Bureau of the Ministry of Foreign Affairs.

Netherlands: \$20.6 million in 1987, Directorate General for International Cooperation, Ministry of Foreign Affairs.

Norway: \$38.9 million in 1987, Norwegian Agency for International Development, Royal Norwegian Ministry of Foreign Affairs.

Sweden: \$33.5 million for 1987-88, Swedish International Development Authority.

Switzerland: \$4.7 million for multilateral assistance in 1988, Directorate for Development and Humanitarian Aid, Ministry of Foreign Affairs.

United Kingdom: \$23.8 million in 1987, Overseas Development Administration.

West Germany: \$32.2 million in 1986, Federal Ministry for Economic Cooperation.

—R.Y.

Source: Population Crisis Committee, Population Briefing Paper No. 21, December 1988, p. 20.

SURVEY REPORT

Dominican Republic

Dominican women opt for effective means of contraception, but still prefer relatively large families, according to the results of the 1986 Demographic and Health Survey (DHS) in the Dominican Republic. The 1986 DHS, for which 7,649 women 15 to 49 years of age were interviewed, was the third national-level fertility and family planning survey conducted in that Caribbean country since 1980.

Although only one-half of the married women surveyed were currently using a contraceptive, over 93 percent of these women were using an effective method. Female sterilization is the most preferred method, employed by one-third of all married Dominican women of reproductive age. The pill is the second most popular method, used by 8.8 percent of the married women surveyed, followed by the IUD, with a 3 percent use rate. Only 2 percent of the women used another modern method, and 3 percent relied on rhythm, withdrawal, or some other less effective method.

Earlier family planning surveys showed similar preferences concerning methods, but slightly lower prevalence rates. In 1975, 33 percent of the married women were using family planning, and 47 percent were contracepting in 1983.

The majority of women not contracepting wanted to get pregnant, and relatively few showed a desire to wait several years between births. About 29 percent of the women said that they did not want any more children within the next two years yet were not using any form of effective contraception. Women most often cited "health" reasons for not using a family planning method, perhaps reflecting a fear of side effects from some methods.

Fertility has also been falling in the Dominican Republic in recent decades. The total fertility rate, or number of lifetime births per woman, exceeded 6 children per woman in the 1970s, yet fell to about 4.1 in 1983. The 1986 DHS recorded a total fertility rate (TFR) of 3.7 lifetime births per woman for the 1983-1985 period, the first time this rate had declined below 4.

However, Dominican women are having more children than they would prefer, according to the report. The "wanted" TFR, or the number of lifetime births women would like to have, was calculated to be only 2.8 births based on the responses of recent mothers to questions about whether they had planned their last birth. The difference of one child between the actual TFR and the "wanted" TFR suggest that Dominican women might make greater use of family planning services.

The survey also documented a need for greater access to maternal and child health services. Although infant mortality has fallen since the 1970s, the Dominican Republic still has one of the highest infant mortality rates (IMR) in the region. About 68 infants per 1,000 die before their first birthday, according to the 1986 DHS. Expansion of health services into the rural areas has helped child and maternal health, and accounts for most of the improvement in the national IMR. In 1986, about three-quarters of the children under age 5 had been vaccinated against one or more childhood diseases, however, few have been protected against all six of the most devastating childhood diseases (polio, diphtheria, tetanus, whooping cough, TB, and measles).

—M.K.

DEMOGRAPHER'S PAGE

Effects of Census Adjustment

by William P. O'Hare

With the 1990 Decennial Census a little over a year away, many political observers are beginning to think about the impact the next census will have on the apportionment of Congress. With large population shifts from the Northeast and Midwest to the Sunbelt states, many seats in Congress will change.

These major shifts will unquestionably change the makeup of Congress. But another, separate issue is whether the decennial census count should be *adjusted*, with the theoretical goal of making it more accurate. Such an adjustment has never been done, but several powerful interest groups are now lobbying for it.

Not only whether to adjust, but *how* to adjust are important questions. The potential impact of various adjustment scenarios on the apportionment of Congressional seats following the 1990 Decennial Census follows.

Proposed Adjustments

The change most widely discussed is the possible adjustment of the census count to correct for the undercount of minorities. A long series of studies by the Census Bureau show that over the last several censuses, minorities have been missed at a much higher rate than whites. About 5.9 percent of blacks were missed in the 1980 Census, compared to about 1 percent of whites and other races.¹ While the data are less reliable, it is generally believed that Hispanics are missed at about the same rate as blacks.² Following the 1980 Census, many large cities sued the Census Bureau hoping that the courts would compel the Bureau to adjust its figures to reflect the uncounted minorities. After protracted litigation, the Census Bureau position

prevailed and counts were not adjusted.

The issue of undercount adjustment in the 1990 Census is already being raised by powerful interest groups. For example, a House Bill (HR 3511) which would require the Census Bureau to adjust census figures based on the undercount of minorities was seriously entertained by the House Post Office and Civil Service Committee before going down to defeat, in large part because of the amendments that were added to it. A suit has already been filed in federal court asking that the Bureau be required to make statistical adjustments. No trial date has been set for this case.

The second adjustment issue that has received popular attention involves undocumented aliens. Just prior to the 1980 Census, the Federation for American Immigration Reform (FAIR) sued the Census Bureau in an attempt to have the courts make the Bureau eliminate any illegal aliens from the num-

bers used in Congressional apportionment. That suit was thrown out on technical grounds.

There is a long history of legislative efforts³ to have illegal aliens removed from the census counts that goes back as least as far as 1929. During the last Congress, five separate bills were introduced which would exclude illegal aliens from the population count used to apportion the House of Representatives.⁴ A suit was filed in February 1988 which would accomplish the same thing if successful.

The third type of adjustment that resulted in litigation following the 1980 census involves imputation—a technical procedure employed by the Census Bureau. In a few cases, Census Bureau enumerators are unable to make contact with people in a housing unit, even though neighbors have indicated that the housing unit is definitely inhabited. If enumerators are unable to make contact after several callbacks, the Census Bureau notes that the housing

Table 1. Eight Scenarios for Adjustments to the 1990 Census

Scenario 1.	No adjustment to Census figures
Scenario 2.	The minority population (blacks plus Hispanics) in each state is increased by 5 percent
Scenario 3.	The number of undocumented aliens is subtracted from each state's figure
Scenario 4.	The number of imputed persons is subtracted from each state's figure
Scenario 5.	Two adjustments are made simultaneously: 1) The minority population in each state is increased by 5 percent, and 2) The number of undocumented aliens is subtracted from each state's figure
Scenario 6.	Two adjustments are made simultaneously: 1) The minority population in each state is increased by 5 percent, and 2) The number of imputed persons is subtracted from each state's figure
Scenario 7.	Two adjustments are made simultaneously: 1) The number of undocumented aliens is subtracted from each state's figure, and 2) The number of imputed persons are subtracted from each state's figure
Scenario 8.	All three adjustments are made simultaneously

unit is inhabited but the number of inhabitants is unknown. The Bureau then uses a computerized procedure for assigning, or "imputing," a number of inhabitants for the housing unit based on information about surrounding housing units.

This issue is less well known than the issues of minority undercount adjustment or the exclusion of illegal aliens, but the exclusion of imputed persons from a state's population count could affect the apportionment of Congressional seats.

The imputation procedure accounted for approximately 761,000 persons out of a final count of 226.5 million in the 1980 Census (0.34 percent of the total). Not surprisingly, some states have more of these "imputed" persons than others. Following the 1980 Census, the State of Indiana sued the Census Bureau in an effort to have the people that were imputed by the Census Bureau removed from the count of each state's population that is used for reapportionment. The Census Bureau prevailed in court.

The Result

While adjustment has become an issue in which significant political power is presumed to be at stake, what would actually happen to Congressional apportionment if the 1990 Census were adjusted? Analysis of the impact of possible adjustments to census data requires a projection of state populations to 1990 and some underlying assumptions about the undercount in the 1990 Census. The three major assumptions used in this Demographer's Page are outlined below:

1. Blacks and Hispanics will be undercounted by 5 percent in every state.
2. The number of illegal aliens counted in each state in the 1990 Census will be the same as those estimated in the 1980 Census.
3. The number of people "imputed" in each state's total population in 1990 will be the same as in 1980.

Table 2. The Impact of Various Adjustment Scenarios on Reapportionment Following 1990 Census

State	Projected Congressional	Scenarios							
	seats based on	Difference from column 1 based on results of scenario							
	no adjustment	1	2	3	4	5	6	7	8
Ala	7	0	0	0	0	0	0	0	0
Alaska	1	0	0	0	0	0	0	0	0
Ariz	7	0	0	0	0	0	0	0	0
Ark	4	0	0	0	0	0	0	0	0
Calif	50	0	-1	0	0	+1	-1	-1	
Colo	6	0	0	0	0	0	0	0	0
Conn	6	0	0	0	0	0	0	0	0
Del	1	0	0	0	0	0	0	0	0
Fla	22	0	0	0	0	0	0	0	0
Ga	12	0	0	0	0	0	0	0	0
Hawaii	2	0	0	0	0	0	0	0	0
Idaho	2	0	0	0	0	0	0	0	0
Ill	20	0	0	0	0	0	0	0	0
Ind	10	0	0	0	0	0	0	0	0
Iowa	5	0	0	0	0	0	0	0	0
Kan	4	0	0	0	0	0	0	0	0
Ky	7	0	0	-1	0	-1	0	0	0
La	8	0	0	0	0	0	0	0	0
Maine	2	0	0	0	0	0	0	0	0
Md	8	0	0	0	0	0	0	0	0
Mass	10	0	0	0	0	0	0	0	0
Mich	16	0	0	0	0	0	0	0	0
Minn	8	0	0	0	1	-1	0	0	0
Miss	5	0	0	0	0	0	0	0	0
Mo	9	0	0	0	0	0	0	0	0
Mont	1	0	0	0	0	0	0	0	0
Neb	3	0	0	0	0	0	0	0	0
Nev	2	0	0	0	0	0	0	0	0
N.H.	2	0	0	0	0	0	0	0	0
N.J.	14	0	0	0	0	0	0	0	0
N.M.	1	0	0	0	0	0	0	0	0
N.Y.	31	0	0	0	0	0	0	0	0
N.C.	12	0	0	0	0	0	0	0	0
N.Dak	1	0	0	0	0	0	0	0	0
Ohio	19	0	0	0	0	0	0	0	0
Okla	6	0	0	0	0	0	0	0	0
Oreg	5	0	0	0	0	0	0	0	0
Pa	20	0	+1	+1	+1	+1	+1	+1	
R.I.	2	0	0	0	0	0	0	0	0
S.C.	6	0	0	0	0	0	0	0	0
S.D.	1	0	0	0	0	0	0	0	0
Tenn	9	0	0	0	0	0	0	0	0
Tex	31	0	0	0	0	0	0	0	0
Utah	3	0	0	0	0	0	0	0	0
Vt	1	0	0	0	0	0	0	0	0
Va	11	0	0	0	0	0	0	0	0
Wash	8	0	0	0	0	0	0	0	0
W.Va	3	0	0	0	0	0	0	0	0
Wis	8	0	0	0	0	0	0	0	0
Wyom	1	0	0	0	0	0	0	0	0

Source: PRB projections.

Eight different scenarios for adjusting the census are listed in Table 1. The results of these scenarios for reapportionment of Congress following the 1990 Census are presented in Table 2.

It is clear that for most states, none of the adjustments described here will make any difference. For 46 out of the 50 states, none of the adjustments

Continued on next page

Demographer's Page

Continued from previous page

alone or in combination would cause the state to gain or lose a seat. The four states that might be affected by an adjustment of the types discussed here are California, Kentucky, Minnesota, and Pennsylvania.

Interestingly, Scenario 2, minority undercount adjustment, the modification of the census figures which has received the most attention, would not result in movement of any seats between states. Some past studies which indicate a big impact from this type of adjustment failed to adjust both the black and Hispanic populations, or made an adjustment in one state or locality but not others.

However, each of the other seven adjustment scenarios would result in a different apportionment of Congress.

The elimination of undocumented aliens from the numbers used for apportionment, Scenario 3, would move a seat from California to Pennsylvania. This is not surprising when you realize that the 1980 Census figures for California included an estimated 1 million illegal aliens. When these million people are taken out of California's projected population, that state loses a seat. Since Pennsylvania is projected to have gained almost enough population for an additional seat anyway, it is not surprising that the seat lost by California goes to Pennsylvania.

Scenario 4 (subtracting imputed persons from the census counts for each state) would result in one seat moving from Kentucky to Pennsylvania.

Scenarios 5 through 8 involve various combinations of adjustments. Scenario 5, which includes minority undercount adjustment and subtraction of undocumented aliens, would result in a seat moving from Minnesota to Pennsylvania.

Scenario 6, minority undercount adjustment and subtraction of imputed persons, would result in the movement of two seats. Under this scenario, Kentucky and Minnesota would each lose a seat, and California and Pennsylvania would gain one seat each.

Scenario 7, which includes subtracting undocumented aliens and imputed persons from each state's figure, would

result in one seat moving from California to Pennsylvania.

Finally, if all three adjustments were made simultaneously (Scenario 8), one seat would move from California to Pennsylvania.

Conclusions

It appears that none of the adjustments to census figures that are being urged upon the Bureau by various interest groups are likely to make a big difference in the overall apportionment of Congress following the 1990 Census. Nonetheless, for those few states that may be in jeopardy of losing a seat, and for those states that see the prospect of gaining an additional seat, the adjustment question is significant.

Under most adjustment scenarios, Pennsylvania is likely to gain an additional seat. Minnesota and Kentucky are not likely to gain an additional seat under any of the adjustment scenarios, but they may lose a seat depending on which adjustments are selected. California is unique in that it may gain a seat under some adjustment scenarios,

or lose a seat under different adjustment scenarios.

It is important to note that even though adjustment of census figures is not likely to have a major impact on Congressional reapportionment in 1990, adjustment of census figures would have a significant impact on the distribution of federal and state funding based on population figures. Furthermore, adjustment would have an impact on the redrawing of election district boundaries for federal, state, and local offices that follows the census. Consequently, it should be clear that adjustment issues are important for many reasons.

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2. *Ibid.*, Table 7.1.
3. Black, Hugo L., Remarks in the Senate in *Congressional Record*, Vol. 71, May 1929, p. 2078.
4. Williams, Jennifer and David C. Huckabee, *Proposed Exclusion of Illegal Aliens from the Population Used to Apportion the House of Representatives: A Methodological and Policy Analysis*—Congressional Research Service Report 88-418 Gov., June 8, 1988.

POSITIONS/PROFESSIONALS

AID Economist. The Office of Population of the U.S. Agency for International Development has an immediate opening in its Policy Development Division for a part-time economist (i.e., up to 39 hours per week). The position will be filled at the GS-13 level (starting salary range of \$41,121 to \$53,460) and is based in the Washington, D.C. area. **Duties:** Serves as an economic advisor to the Office on the economic implications of population dynamics and programs. Conceptualizes and executes a systematic research effort on population and economic development and the role of population and family planning programs in meeting future contraceptive needs. Analyzes the demand for family planning on global, regional, and country levels. Ana-

lyzes the efficacy of alternative public sector resource allocations in the population sector. Provides technical direction and management to AID-sponsored projects which are concerned with population and development issues. Represents the Agency at academic, intergovernmental and professional conferences. **Qualifications:** Masters or Ph.D. in economics and at least three years of professional experience. Must be a U.S. citizen. Foreign language capability highly desirable, but not required. Applicants should submit vitae and completed SF-171 as soon as possible to: Agency for International Development, Office of Personnel Management, 2401 E Street, NW, Room 1127 SA-1, Washington, D.C. 20523, Attention: Merit Promotion Staff.

Washington Watch

Continued from page 4

reductions for research centers are projected to be 17.5 percent.

The proposed budget for the National Institute on Aging is \$221.2 million, an increase of \$8 million over FY 1989. The NIA spends about 20 percent of its extramural funds on social and behavioral research.

1990 Census

Other recommendations in the FY 1990 budget include \$116 million for the Census Bureau. The \$20 million increase is primarily targeted for business and manufacturing statistics and demographic surveys. In addition to its annual budget, the Bureau will receive \$1.3 billion of the \$2.6 billion allotted for the Decennial Census. In the last fiscal year, the Bureau spent \$451 million on 1990 Census activities and there is some indication that the planned \$2.6 billion may not be enough to complete the process.

In a complete turnaround, the Census Bureau has decided to include nine groups of Asian or Pacific Islanders, plus "Other API" and "Other Race," to be checked off on the 1990 Census form. Before leaving office, President Reagan had vetoed legislation instructing the Bureau to list groups. The Bureau, seeing strong Congressional support—probably even enough to override the veto had Congress been in session—decided to include the check-offs and proceed with the printing of the questionnaires.

Deputy Director Louis Kincannon will be the Acting Director of the Census Bureau until a new director is appointed to succeed retired John Keane.

—Nancy McConnell

Nancy McConnell is director of the Washington, D.C., office of the Population Resource Center. The Center monitors legislative issues of concern to the Population Association of America. Neither the Center nor the Association advocates any particular population policy but works to protect funding for quality demographic research.

SOFTWARE

CENDATA is the U.S. Census Bureau's online information service, making available the latest U.S. demographic and economic data to anyone with a personal computer, a telephone modem, and a subscription to CompuServe or DIALOG.

Among its offerings: population data and projections; estimates for states, metropolitan areas, and countries; estimates of households by states, and various subjects from Current Population Reports. The data base also provides demographic data profiles for 205 countries, as well as such economic statistics as annual business data by county, per cap-

ita income, and key monthly economic indicators. Also included: data from the 1988 Statistical Abstract and the text from Bureau press releases, updated daily.

There is no extra charge for using CENDATA above and beyond the base subscription rates for CompuServe and DIALOG online services. If you subscribe to these services, you already have access to CENDATA. For further information about this Bureau resource, contact CENDATA Program, Data User Services Div., Bureau of the Census, Washington, D.C. 20233. Phone number: (301) 763-2074.

—A.H.

POPULATION UPDATE

Estimated United States Population:

As of December 1, 1988	247,443,000
As of December 1, 1987	245,041,000

The above estimates include armed forces overseas and are from U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1029.

Estimated World Population:

As of February 1988	5,180,622,000
Annual growth	89,000,000

Estimated by extrapolation from the mid-1988 population on PRB's *World Population Data Sheet*.

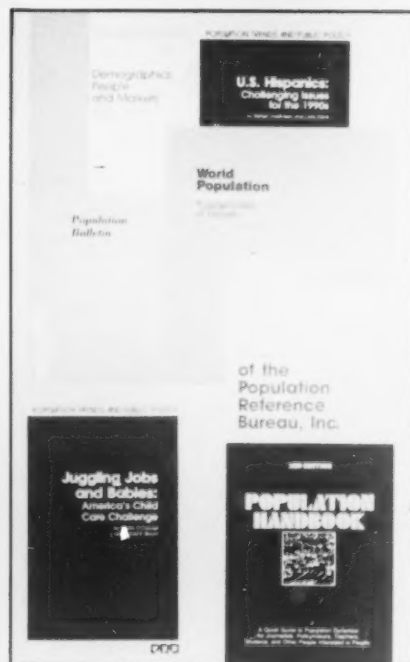
Latest Provisional Statistics for the U.S.: November 1988

Item	12 months ending with November					
	Number		Rate			
	1988	1987	1988	1987	1986	1985
Live births	3,897,000	3,812,000	15.9	15.7	15.5	15.8
Deaths	2,168,000	2,122,000	8.8	8.7	8.7	8.8
Natural increase	1,729,000	1,690,000	7.1	7.0	6.8	7.0
Marriages	2,386,000	2,421,000	9.7	10.0	9.9	10.2
Divorces	1,170,000	1,159,000	4.8	4.8	4.8	5.0
Infant deaths	38,500	37,800	9.9	9.9	10.5	10.5
Population base (in millions)			245.4	243.1	240.8	238.1

Note: Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births.

Source: *Monthly Vital Statistics Report* (Vol. 37, No. 11) from the National Center for Health Statistics.

Notification of New Rates



Because of rising production costs, PRB has increased its sale prices for a number of products. The new 1989 rates are:

Population Bulletin, \$7.00 ea. (Bulk copies, 2-10, \$6.50 ea.; 11-50, \$5.50 ea.; 51 or more, \$4.00 ea.)

Population Data Sheets, \$3.00 ea. (Bulk copies, 2-10, \$2.75 ea.; 11-50, \$2.50 ea.)

Population Trends and Public Policy reports, \$5.00 ea. (Bulk copies, 2-10, \$4.50 ea.; 11-50, \$4.00 ea.; 51 or more, \$3.80 ea.)

Population Learning Series Modules, \$3.00 ea. (Bulk copies, 2 or more, \$2.25 ea.)

U.S. orders: Orders of \$50.00 or less must be prepaid. For postage and handling, add \$1.00 or 5 percent of total order (whichever amount is greater). For orders over \$50.00, postage will be included on the invoice at 5 percent.

Orders outside the U.S.: Add \$1.00 or 25 percent of the cost of the publication ordered (whichever amount is greater) to cover postage and handling.

For further information, or to receive a copy of PRB's 1989 Spring publication order form, contact PRB's circulation dept., at (202) 639-8040.

TAKE A NUMBER

We Like To Be: Down by the sea, as it happens. A little over 50 percent of the U.S. population lives within 50 miles of a coastal shoreline, according to the Census Bureau's 1988 edition of the *Statistical Abstract*. About 39.9 percent resides near the oceans and another 12.4 percent reside in the area of the Great Lakes. This proportion has been declining since 1970, however, when it reached 53.7 percent.

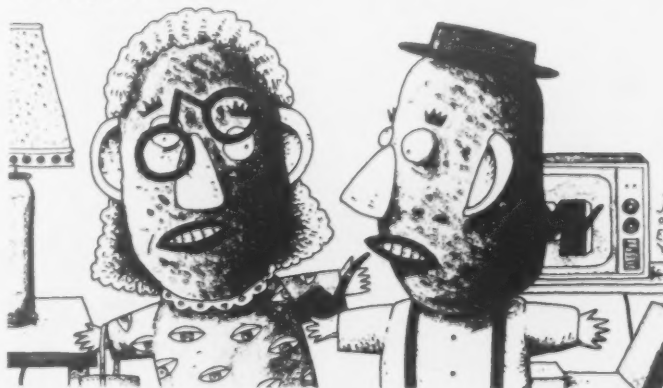
Putting It Off: Delayed marriage is a rapidly increasing phenomenon on the American scene. In 1988, 61 percent of women and 78 percent of men aged 20-24 had never married. This contrasts with 1960 when a majority (54 percent) were already married by age 20 alone. In 1960, only 16 percent of women age 24 had never married, a figure which stands at 44 percent today. These data are from the Census Bureau's Current Population Survey and suggest that some sort of boomlet in marriages could occur when some of the delayed weddings take place, but also suggest that the proportion of Americans never marrying will likely increase.

Here and There: China's birth rate rose again in 1987, to an official total fertility rate of 2.5 children per woman. 1988 survey estimates should be available soon. China's redefinition of many towns from "rural" to "urban" has caused problems for demographers and made China's population appear to have gone from 21 percent urban in 1982 to 47 at present. Italy has wrested the claim to the lowest total fertility rate from West Germany, reporting a rate of 1.31 lifetime births per woman in 1987 compared to 1.38 for West Germany. About 1.8 million undocumented residents have applied for legalization under the provisions of the Immigration Reform and Control Act of 1986 (IRCA), 70 percent of them from Mexico and 55 percent in California, of those, about 82 percent had originally entered the country illegally and the balance had overstayed a nonimmigrant visa. Another 1.3 million applied under the Special Agricultural Worker (SAW) provisions, 82 percent from Mexico and 54 percent in California.

— C.H.

ADDENDA

THEY WERE YOUNG VEGETABLES LIVING IN SIN... THEY WERE COHABITATO HEADS!!



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CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in *Current Readings*. Publishers may address review copies to Book Review Editor, *POPULATION TODAY*, Population Reference Bureau, 777 14th St. N.W., Washington, D.C. 20005.

BORN UNWANTED: Developmental Effects of Denied Abortion

by Henry P. David, Zdenek Dytrych, Zdenek Matejcek, and Vratislav Schuller. New York: Springer, 1988. 143 pages. \$26.95. ISBN 0-8261-6080-8.

At last, a slim volume documents what we have known "instinctively" that all else being equal, it is better to be born a wanted child rather than an unwanted child.

Henry P. David—a clinical psychologist and director of the Transnational Family Institute—and his Czech colleagues base this conclusion on the findings from their groundbreaking longitudinal study of children in Czechoslovakia whom they studied from childhood through early adulthood. These children, born to mothers who had unsuccessfully applied twice for permission to abort the pregnancy, were studied over the years in terms of cognitive, psychological, academic, health and social variables. Similar studies of unwanted children in Sweden and Finland are also described.

In addition to these remarkable and instructive studies, a major contribution is the discussion of "wantedness." While we think we know what is meant by the slogan, "Every Child a Wanted Child," in reality the concept is far from clear. Better described as a continuum than an either/or situation, it may be manifested as eagerly planned for and delighted parenthood at one extreme to an abhorred pregnancy which ends in infanticide at the other.

In between are unintended conceptions but welcomed or accepted pregnancies; reluctant pregnancies

which turn into cherished babies, planned children whose parents find childrearing burdensome and regret the decision. And some children are loved when they are little but rejected as adolescents. What does it mean to be "wanted" or "unwanted?"

By defining unwantedness operationally as children born to mothers who were twice denied abortion for the same pregnancy, the Prague study avoids the subjectivity of other studies. Additionally, by carefully matching the subjects and controls for socioeconomic status, age of mother, gender, family size, birth order and presence of father or stepfather in the home, the study could concentrate specifically on the effects of unwantedness.

What are the effects? The authors conclude that "involuntary childbearing is rarely conducive to sound public health practice. Unwantedness can pose significant risks for child development, with socially undesirable long-term implications. Hopefully [these studies] will strengthen the worldwide efforts to reduce the incidence of unwanted pregnancy, while maintaining ready access to safe legal abortion for women in need." This book deserves a wide readership.

—Elaine Murphy

BASIC DEMOGRAPHIC MEASURES: A Practical Guide for Users

by John Saunders. Lanham, Md.: University Press of America, 1988. 100 pages. \$17.50. library binding. \$9.75 paper. ISBN 0-8191-7166-2; 0-8191-7167-0.

This short book is packed with demographic measures and concepts, all illustrated and explained with examples and exercises. It can serve as a quick reference guide as well as an introductory text or text-supplement for a wide range of courses on population.

Author John Saunders of Mississippi State University walks the

reader through the design of age pyramids and computations for demographic rates and measures, including the life table. The presentation includes basic data, examples of each step in computations, and reinforcing exercises, all of which will be helpful to the professor who wants to have students work things out for themselves.

The book sticks to basics: age-sex composition, fertility, mortality and migration measures, life tables, and the calculation of growth rates. Projections are mentioned, but the user should consult standard texts for how they're done as well as for topics like indirect measurement and population models.

—Thomas W. Merrick

Books Received

THE AMERICAN CENSUS: A Social History, by Margo J. Anderson. New Haven, Conn.: Yale University Press, 1988. 257 pages. \$40.00 (cloth).

CLASS, RACE & GENDER IN AMERICAN EDUCATION, edited by Lois Weis. Albany, N.Y.: State University of New York Press, 1988. 329 pages. \$49.50 (cloth), \$18.95 (paper).

COUNTY AND CITY DATA BOOK 1988, prepared by the U.S. Bureau of the Census. (A Statistical Abstract Supplement). Washington, DC: U.S. Bureau of the Census, 1988. 797 pages.

FAMILY PLANNING AND CHILD SURVIVAL: 100 Developing Countries, edited by John A. Ross et al. New York: Center for Population and Family Health, Columbia University, 1988. 247 pages.

FAO PRODUCTION YEARBOOK 1987 (Vol. 47), Rome: Italy: FAO, 1988. 351 pages. \$30.00 (paper).

NO. 83 CASE STUDIES IN POPULATION POLICY: Nigeria (ST/ESA/SER.R/83), New York: United Nations, 1988. 38 pages.

SOCIAL CHANGE IN BRAZIL: 1945-1985 The Incomplete Transition, edited by Edmar L. Bacha and Herbert S. Klein. Albuquerque, N.M.: University of New Mexico Press, 1989. 146 pages. \$22.00 (paper).

1988 WORLD HEALTH STATISTICS ANNUAL, Geneva, Switzerland: World Health Organization, 1988. 513 pages.

SPOTLIGHT

CHINA

Part I

Population (mid-1988 est.): 1,087 million
Land Area: 3,705,390 sq. miles
Births per 1,000 pop: 24
Deaths per 1,000 pop: 7
Rate of natural increase: 1.7 percent
Total fertility rate: 2.5 children per woman
Infant mortality rate: 44 per 1,000 live births
Life expectancy at birth: 66 years
GNP per capita (1986 est.): \$300
Capital: Beijing

by Gwenda Brophy

By far the world's most populous country, China's actual population size was for decades a matter of speculation. Since 1982, when both a Census and the national 1-in-1,000 fertility survey were undertaken, the flow of demographic data increased from a trickle to a flood.

China, an ancient civilization, is a predominantly rural, low income country, extending over immense portions of East Asia. The vast majority (93 percent) of the population are Han Chinese, but the government recognizes 55 minority groups, numbering 67 million persons in 1982. Despite the ethnic homogeneity, socioeconomic and demographic characteristics vary widely among the country's 29 administrative districts and between rural and urban areas. Although the "one child per couple" policy (to be discussed in Part 2) is a national goal, the average births per woman (Total Fertility Rate) ranged from 1.3 to 4.4 children in 1982, reflecting uneven enforcement of the population policy as well as socioeconomic factors. The national TFR has probably never fallen below 2.1.

China enjoyed a rapid decline in mortality from the 1950s, but this downward trend was reversed during the Great Leap Forward in 1958 and the



famine of 1959-61 when the death rate peaked at 25 per 1,000 and infant mortality reached 220-440 deaths per 1,000 births. Today, the Crude Death Rate is around 7 and the Infant Mortality Rate stands at about 44, far lower than would be anticipated given China's low per capita GNP. The leading causes of death for urban children 1 to 4 years of age is becoming similar to the pattern in the U.S. and other industrialized nations.

The widespread availability of primary health care, including "barefoot doctors," is thought by many to have been instrumental in China's mortality decline.

Chinese fertility has also undergone a revolution in the second half of this century. The Great Leap Forward and famine years brought a precipitous drop in fertility; the TFR declined from 6 in 1951 to 3.3 in 1961, the tail end of the famine. In 1961, the combination of the high death rates and the depressed fertility yielded negative population growth in nearly all provinces.

A massive fertility boom followed the famine as pressures delaying marriages eased, spouses were reunited, and couples were able to have the births postponed during hard times. These factors combined to push the

TFR up to 7.5 in 1963. The TFR fell back to about 6 children until the end of the 1960s, then began a rapid descent, reaching 2.1 in 1984.

The cohorts born during these postfamine years are exerting an upward pressure on the birth rate today as they reach their 20s,

which is the age of almost all child-bearing in China. This structural factor partly explains the increase in the TFR beginning in 1986.

Chinese concern about excessive population growth has fluctuated since the 1950s. The first birth control campaigns were initiated in 1956-58 and 1962-66, meeting with only modest success. In 1961, a mere 1 percent of married women aged 15-49 practiced contraception, 16 percent in 1966. In 1971-77, a new campaign advocated later marriage, birth spacing, and fewer children. Marriage age subsequently rose from 19.5 years in 1971 to 23.5 in 1979, but age at first birth lagged behind increases at age at marriage, in part due to prolonged engagements, which partly fostered an increase in premarital pregnancies, leading to a decline in the marriage-to-first-birth interval. This was one of the factors influencing a change of policy unique in both goals and means.

Gwenda Brophy is currently at PRB. She holds an M.Sc. in Demography from the London School of Economics.

This is Part I of a 2-part series highlighting key features in demographic developments and trends in China.